

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An injection mold comprising:
a fixed mold having a top surface and a bottom surface spaced from the top surface;
an internal space formed in the top surface;
a passage extending through the fixed mold from the bottom surface to the internal
space, the passage having inner walls for injecting a fluid therethrough and into ~~an~~ the internal
space and a flow accelerating material means provided on the inner walls of the passage;
a movable mold detachably attached to the fixed mold and forming a molding space
together with the internal space of the fixed mold; and
a same flow accelerating material means provided on the inner walls of both the fixed
mold and the movable mold that form the molding space for increasing insulation of the fluid and
reducing a flow resistance between the inner walls and the fluid so as to accelerate flow of the
fluid injected into the injection mold.
2. (Previously Presented) The mold of claim 1, wherein the same flow accelerating
material means is a solid coating material.
3. (Previously Presented) The mold of claim 2, wherein the solid coating material is a
polymer coating material.
4. (Original) The mold of claim 3, wherein the polymer used for the polymer
coating material is PEEK (Poly Ether Ether Ketone).
5. (Original) The mold of claim 3, wherein the polymer coating material is one of
PTFE (Polytetrafluoroethylene), PE (Polyethylene) and methacrylate.
6. (Original) The mold of claim 2, wherein the solid coating material is a ceramic
coating material.

7. (Original) The mold of claim 6, wherein the ceramic coating material is one of aluminum oxide and zirconium oxide.

8. (Currently Amended) An injection mold comprising:
a fixed mold having a top surface and a bottom surface spaced from the top surface;
an internal space formed in the top surface;
a passage extending through the fixed mold, the passage having an inner wall for introducing a fluid therethrough and ~~an~~ into the internal space;
a movable mold detachably attached to the fixed mold and forming a molding space together with the internal space of the fixed mold; and
a flow accelerating means provided on an inner wall of the passage for injecting fluid therethrough and the molding space for accelerating flow of the fluid,
wherein the flow accelerating means is a solid coating material for increasing insulation of the fluid and reducing a flow resistance between the inner wall and the fluid so as to accelerate flow of the fluid, and
wherein the solid coating material is a solid lubricant.

9. (Original) The mold of claim 8, wherein the solid lubricant is one of graphite, molybdenum and disulfide.

10. (Currently Amended) An injection mold comprising:
a fixed mold having a top surface and a bottom surface spaced from the top surface;
an internal space formed in the top surface;
a passage extending through the fixed mold, the passage having an inner wall for introducing a fluid therethrough and ~~an~~ into the internal space;
a movable mold detachably attached to the fixed mold and forming a molding space together with the internal space of the fixed mold; and
a flow accelerating means provided on the inner wall of the passage for injecting fluid therethrough and the molding space for accelerating flow of the fluid,

wherein the flow accelerating means is a solid coating metal material for increasing insulation of the fluid and reducing a flow resistance between the inner wall and the fluid so as to accelerate flow of the fluid, and

wherein the solid coating material is a solid metal.

11. (Original) The mold of claim 10, wherein the solid coating metal is one of lead, indium, cadmium, tin and silver.

12. (Currently Amended) A molding system comprising:
a cylinder having an inlet and an outlet;
a screw installed inside the cylinder and making a mold material and a mixture including a plastic introduced into the inlet of the cylinder flow toward the outlet;
a heater for heating the mold material and mixture introduced in the cylinder;
a fixed mold having a top surface and a bottom surface spaced from the top surface;
an internal space formed in the top surface;
a passage extending through the fixed mold, the passage having an inner wall for injecting a fluid therethrough and ~~an~~into the internal space and a flow accelerating material means provided on the inner walls of the passage;
a movable mold detachably attached to the fixed mold and forming a molding space together with the internal space of the fixed mold; and
a same flow accelerating material means provided on the inner walls of both the fixed mold and the movable mold that form the molding space for increasing insulation of the fluid and reducing a flow resistance between the inner walls and the fluid so as to accelerate flow of the fluid injected into the injection mold.

13. (Original) The system of claim 12, wherein a foaming agent supplier is provided at the side of the inlet of the cylinder to supply a foaming agent into the cylinder.

14. (Original) The system of claim 12, wherein a gas supplier is provided at the side of the inlet of the cylinder to supply a gas into the cylinder.

15. (Previously Presented) The system of claim 12, wherein the flow accelerating means is a solid coating material.

16. - 22. (Canceled)

23. (Currently Amended) A molding system comprising:
a cylinder having an inlet and an outlet;
a screw installed inside the cylinder and making a mold material and a mixture including a plastic introduced into the inlet of the cylinder flow toward the outlet;
a heater for heating the mold material and mixture introduced in the cylinder;
a fixed mold having a top surface and a bottom surface spaced from the top surface;
an internal space formed in the top surface;
a passage extending through the fixed mold, the passage having an inner wall for injecting a fluid therethrough and ~~an~~ into the internal space;
a movable mold detachably attached to the fixed mold and forming a molding space together with the internal space of the fixed mold;
a same flow accelerating material means provided on the inner walls of both the fixed mold and the movable mold that form the molding space for accelerating flow of the fluid injected into the injection mold; and
wherein the same flow accelerating material means is provided on the inner wall of said fixed mold passage.

24. (Previously Presented) The injection mold of claim 1, wherein the same flow accelerating material means is a solid coating material for increasing insulation of the fluid and reducing a flow resistance of the fluid, and wherein the solid coating material is at least one of PE (Polyethylene) and a methacrylate.

25. (Previously Presented) The injection mold of claim 8, wherein the solid coating material is zirconium oxide.

26. (Previously Presented) The molding system of claim 12, wherein the same flow accelerating material means is a solid coating material for increasing insulation of the fluid and reducing a flow resistance of the fluid, and wherein the solid coating material is at least one of PEEK (Poly Ether Ether Ketone), PE (Polyethylene) and a methacrylate.